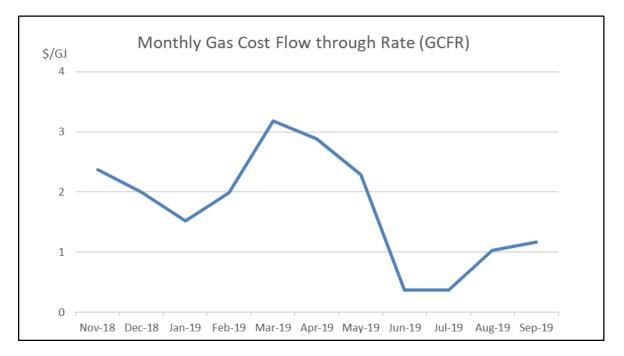
ENERGY PRICES AND MARKETS

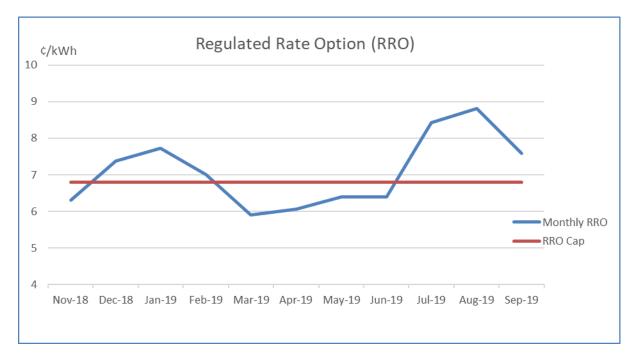
Natural Gas

The 2019 September gas cost flow-through rate (GCFR) was \$1.17 per gigajoule. This is an increase from the exceedingly low price of \$0.37 recorded in June and July. Overall, natural gas market prices remain low due to weak demand, over supply and continuing pipeline constraints. For the first half of September, the Alberta daily price averaged only \$0.50 per gigajoule. Natural gas costs for The City from January to June 2019 are up 5.6 percent (\$341,000) relative to 2018, despite consuming lower volumes of natural gas, due to higher delivery costs.



Electricity

The ENMAX regulated rate option (RRO) price for 2019 September was 7.59 cents per kilowatt hour. The Price Cap of 6.8 cents per kilowatt-hour will be in effect for September (see graph on the next page). Electricity costs for The City from January to July 2019 are up 6.7 percent (\$3.1million) relative to the same period in 2018, despite lower volumes, due to an increased unit cost.



The month-to-date all-hours average price for 2019 September 16 was 5.77 cents per kilowatthour. For reference, the all-hours average price for 2018 September was 3.61 cents per kilowatt-hour. Based on the ICE NGX Canada Inc.(Calgary based natural gas and electricity exchange) forward prices it is expected that the price of electricity will remain near current levels for the remainder of the year.

UTILITY REGULATION UPDATE

Alberta Energy Regulator (AER)

The Alberta Government removed the Alberta Energy Regulator's (AER) entire board of directors on 2019 September 6. An interim board was appointed for a term of nine months. The government announced that it will also launch a full review of the agency's mandate and governance structure.

Energy Minister Sonya Savage said that it is unacceptable that it takes twice as long to get oil and gas projects approved in Alberta as it does in Saskatchewan despite the fact that the AER has hired more staff in recent years. The government will be consulting with stakeholders for recommendations related to the regulator's board, CEO accountability and oversight rules around budgeting and spending.

Alberta Utilities Commission (AUC)

Mark Kolesar, Chair of the AUC, will be attending the 2019 November 14 meeting of GPT. The purpose of the visit is to extend The City's welcome, provide a background on The City's regulatory intervention objectives and governance and to highlight a few of The City's regulatory concerns.

GPT2019-1290 **ATTACHMENT 1**

Alberta Electric System Operator (AESO)

The AESO is directed by the AUC to file a ISO Tariff application by 2020 March 31. With the government's decision to return to the energy only market, activities related to allocating the capacity procurement tariff have ceased. Stakeholder engagement related to allocating the costs of bulk and regional transmission are continuing.

The tariff design review will include revised transmission cost causation methodology, load analysis of major bulk system lines and services such as interruptible, standby and energy storage.

UTILITIES AND INDUSTRY DEVELOPMENTS

Travers Solar Project

On 2019 August 27th, The AUC approved a \$500 million solar power project for southern Alberta that will be the largest in Canada. Greengate Power Corp. of Calgary will proceed with project construction next year with commercial operations set for 2021. The solar facility is designed to generate 400 megawatts at peak capacity, enough to supply electricity to more than 100,000 homes. Greengate Power said that construction of the project will create hundreds of jobs.

The project will be located in Vulcan county, which is 120 kilometers southeast of Calgary. The project will employ 1.5 million solar panels on approximately 1,600 hectares currently used primarily as grazing and crop land. This project is not part of the former government's Renewable Energy Program that provided a long term guaranteed price but is a non-subsidized commercial risk investment.

Suncor Energy Oil Sands Cogeneration

Suncor Energy has announced that it will invest \$1.4 billion to install two cogeneration units in its Oil Sands Base Plant. The natural gas fueled cogeneration facilities will replace petroleum coke-fired boilers reducing greenhouse gas emission by 25 percent. The cogeneration units will provide steam generation for Suncor's bitumen extraction and upgrading operations as well as providing 800 megawatts to Alberta's electricity grid.

Suncor says that the project will lower emissions equivalent to removing 550,000 cars from the road. The new cogeneration units will also cut Base Plant sulfur dioxide emissions by 45% and nitrogen oxide emissions by 15 percent.

Eavor Technologies Geothermal Project

Eavor Technologies, a Calgary based firm, is constructing a \$10 million geothermal project in central Alberta that is considered a "game changer" because it doesn't use water and creates no greenhouse gas emissions.

The project is a closed loop geothermal project that works as a kind of radiator. Wells are drilled kilometers apart and several kilometers deep before they are directionally drilled to intersect with each other creating a huge U-shaped well. The project uses a proprietary fluld to circulate through the system instead of water like other geothermal developments and is a scalable source of emissions free power.

Drilling is underway and the loop is expected to be closed by the end of 2019 September. The project benefits from Alberta's drilling industry expertise and abundance of available drilling equipment. Eavor Technologies says that the technology can be used almost anywhere rather than the 5 percent of of the world where traditional geothermal resources are situated. The

project received \$1 million in funding from Alberta innovates and from Emissions Reduction Alberta.

TELECOMMUNICATIONS

5G Ready for 2020

- The 5G Ready for 2020 process re-design work has moved into implementation. This includes:
 - o a soft launch to test the revised process,
 - development on an interim, followed by a long term, application intake and workflow system,
 - o collaboration review of the process with the wireless service providers,
 - o development of standard terms and conditions and a master agreement.
- This work will facilitate the deployment of the small cells, and other equipment, necessary for 5G.